Distinguished Lecture

PASCHKE DUALITY AND C∗-ALGEBRA EXTENSIONS

Huaxin Lin

University of Oregon and ECNU

Time: 16:00-17:00, Wednesday, Aug 21,2019

Venue: Room 102, SCMS, Jiangwan Campus

Abstract: We revisit the Paschke duality theorem in view point of study of C∗-algebra extensions.

We will particularly interested in the special case that the following extensions

$$0 \to B \to E \to A \to 0,$$

where A is a separable amenable C∗-algebra and B is a non-unital but σ-unital purely infinite simple C∗-algebra.

The study leads to show that every unital separable amenable purely infinite simple C∗-algebra A with trivial K-theory is isomorphic to O2. This will lead to a Universal Coefficient Theorem for separable amenable C∗-algebras.